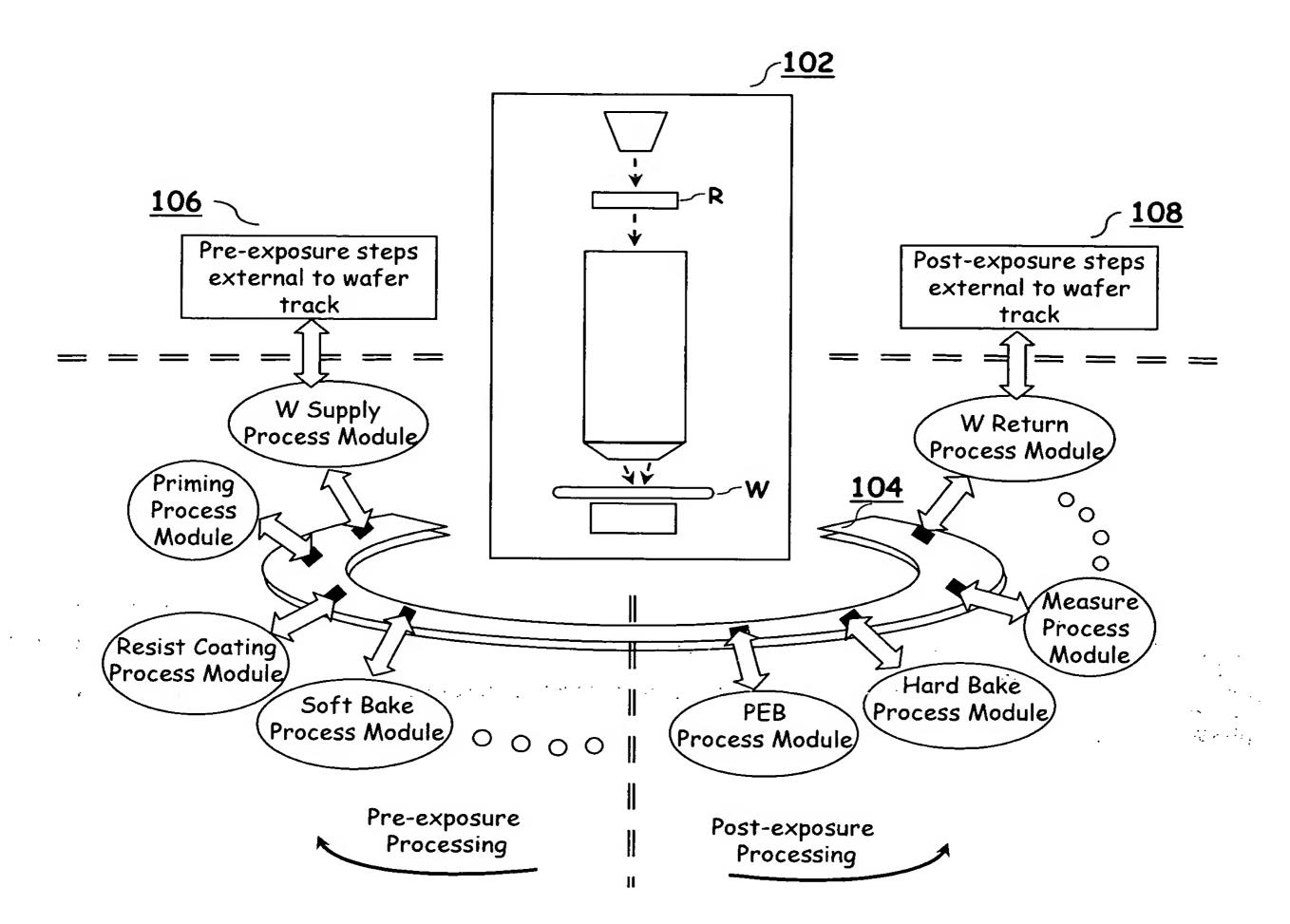
INVENTOR: Theodore A. Paxton et al. MATTER NO.: 304253 CLIENT REF.: D-1748

FILED: September 17, 2003
TITLE: ADAPTIVE LITHOGRAPHIC CRITICAL ...

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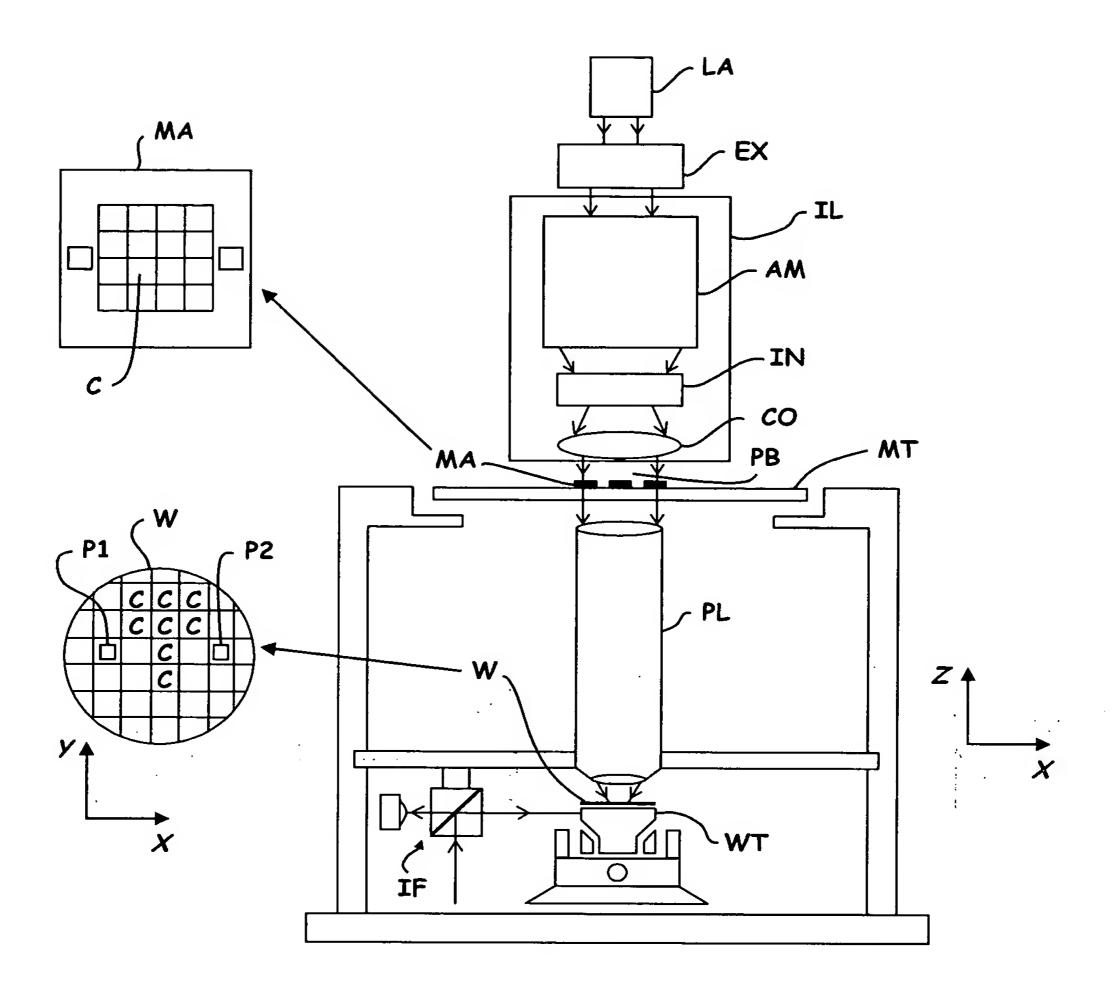


100

FIG. 1A

INVENTOR: Theodore A. Paxton et al. 'MATTER NO.: 304253
CLIENT REF.: D-1748
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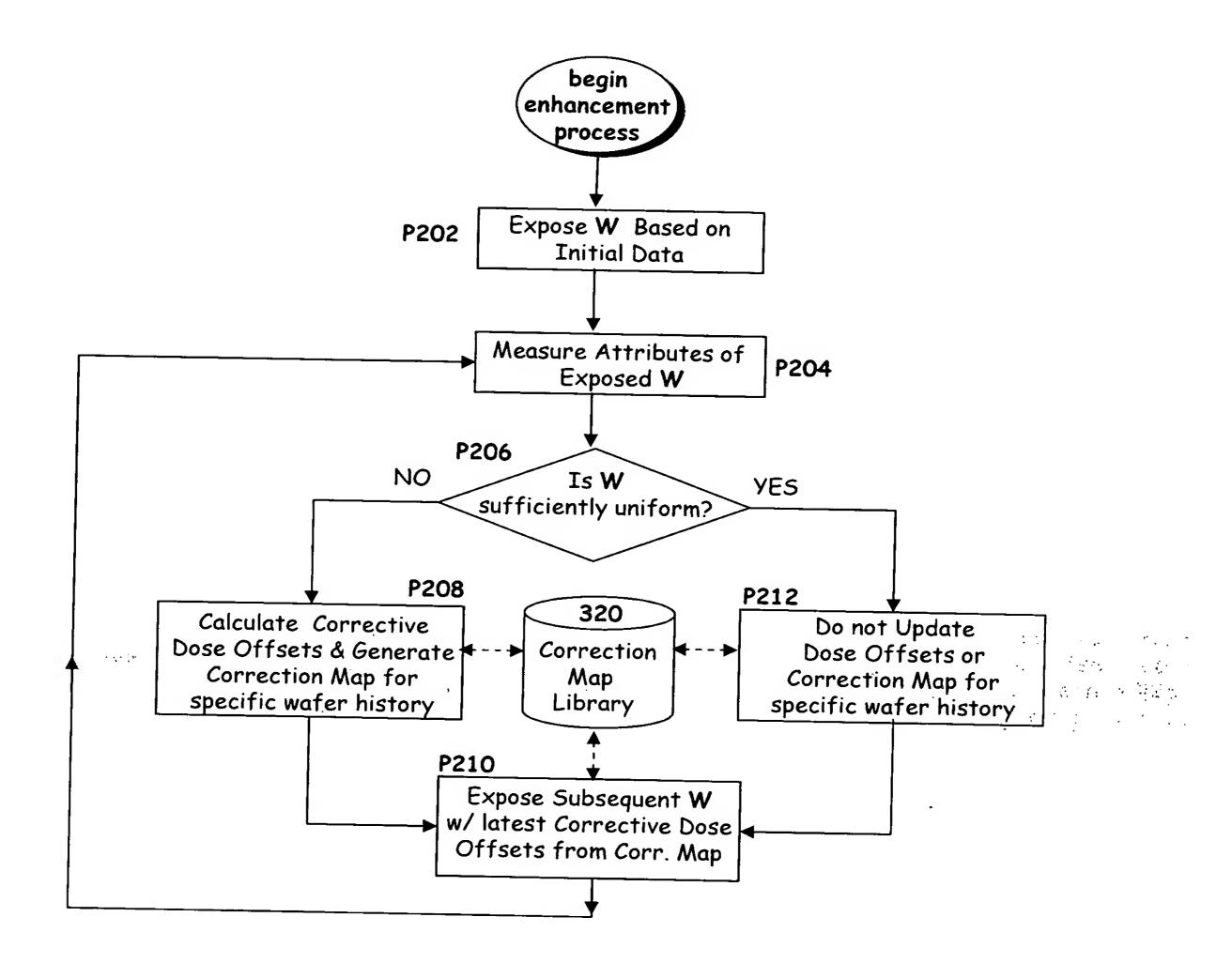
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INVENTOR: Theodore A. Paxton et al. MATTER NO.: 304253 CLIENT REF.: D-1748 FILED: September 17, 2003

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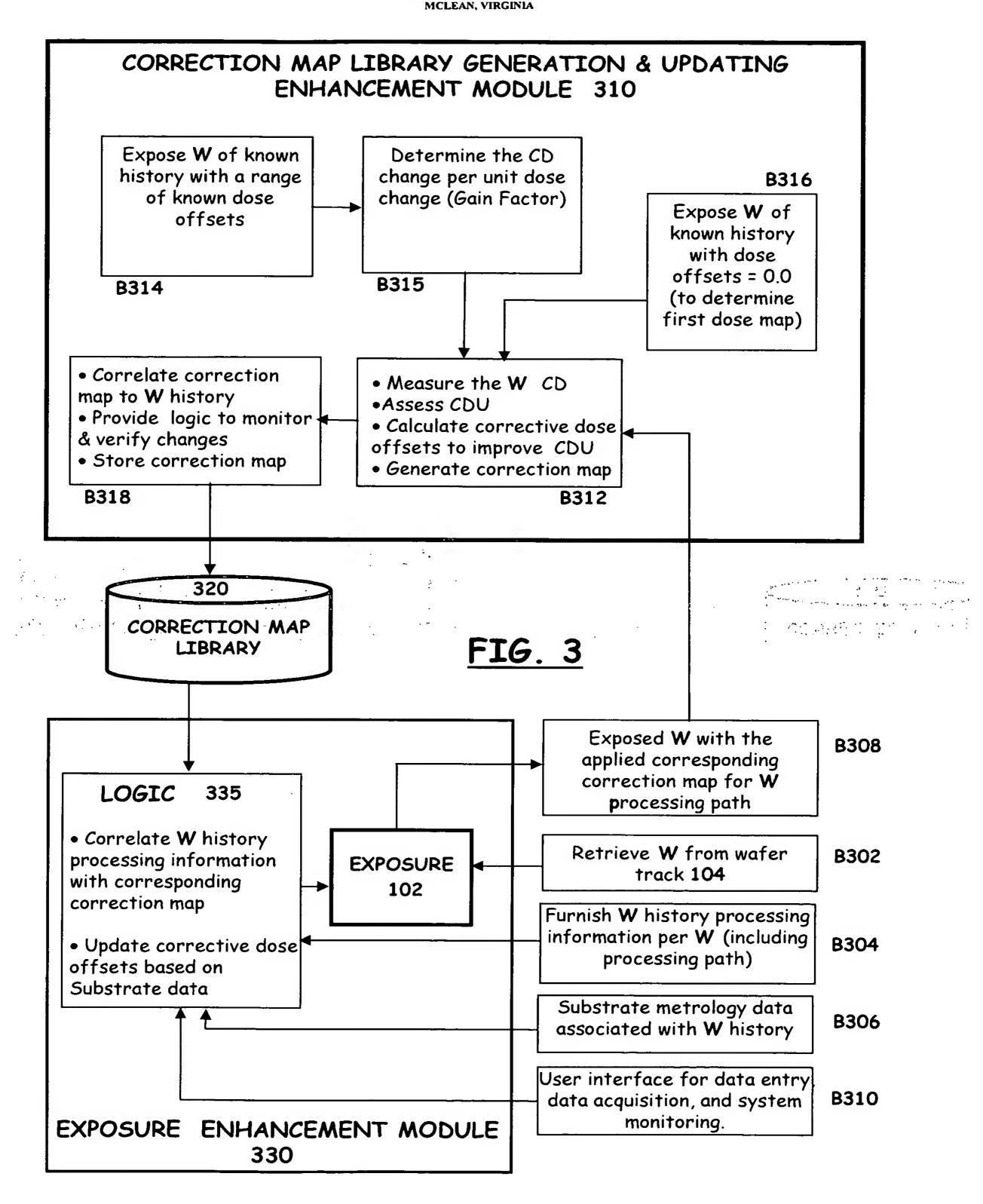


200

FIG. 2

INVENTOR: Theodore A. Paxton et al.
MATTER NO.: 304253
CLIENT REF.: D-1748
FILED: September 17, 2003
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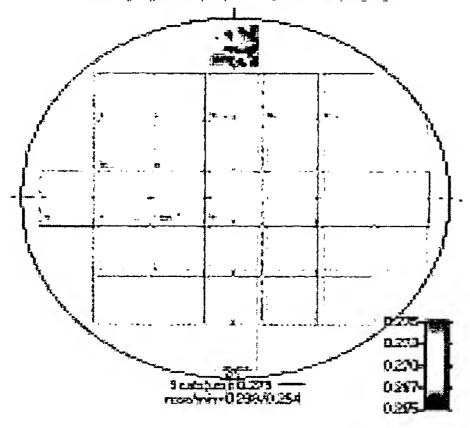
INVENTOR: Theodore A. Paxton et al.
MATTER NO.: 304253
CLIENT REF.: D-1748
FILED: September 17, 2003
TITLE: ADAPTIVE LITHOGRAPHIC CRITICAL ...

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## Examples Pre Exposur Substrate M trology Data (B306)

# Resist thickness



BARC Thickness

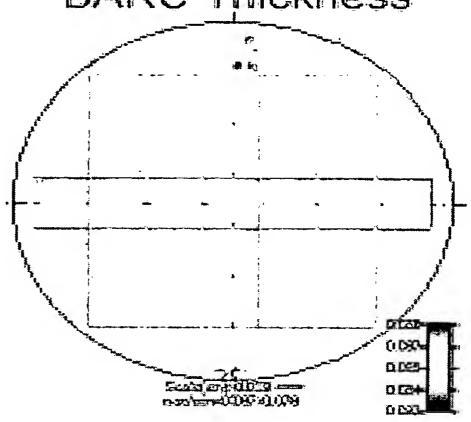


FIG. 4A

FIG. 4B

## Example Wafer Dose Layout & Range (B314)

# Energy Meander Dose Map (mJ) 33.4 33.6 33.8 34.0 34.2 34.4 34.6 33.2 33.0 32.8 32.6 32.4 32.2 32.0 30.6 30.8 31.0 31.2 31.4 31.6 31.8 30.4 30.2 30.0 29.8 29.6 29.4 29.2 27.8 28.0 28.2 28.4 28.6 28.8 29.0 27.6 27.4 27.2 27.0 26.8 26.6 26.4 25.0 25.2 25.4 25.6 25.8 26.0 26.2

Example CD Change per Unit Dose (B315)

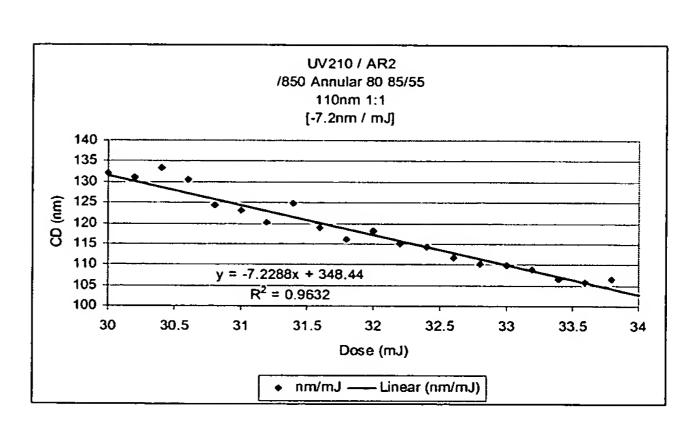


FIG. 4C

FIG. 4D

INVENTOR: Theodore A. Paxton et al. MATTER NO.: 304253 CLIENT REF.: D-1748

FILED: September 17, 2003
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100

# Exampl Initial Dose Map Dose Offset = 0 (B316)

with Dose Offset = 0 (B312)

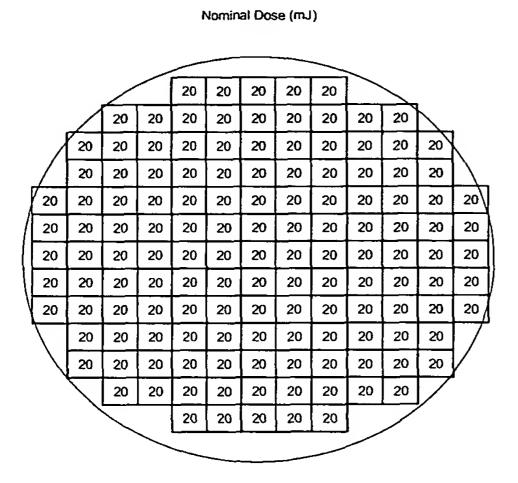
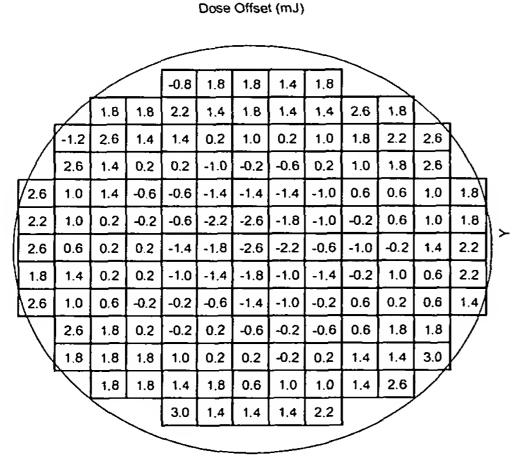


FIG. 4E

FIG. 4F

# Example Wafer Dose Layout with Dose Offset (B308)

Example CD Results: with Applied Dose Offset (B312)



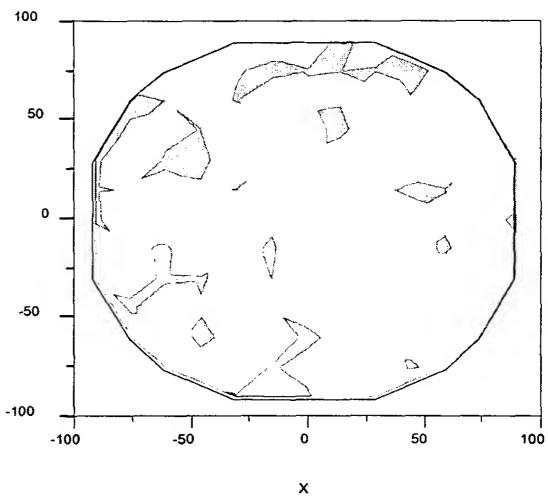


FIG. 4G

FIG. 4H